

ABSTRACT

Technology for *in situ* remediation of undetonated explosive material. An explosive apparatus contains an explosive material in close proximity with a carrier containing microorganisms and with nutrient for the microorganisms. An explosive mixture capable of self remediation includes an explosive material that is intermixed with or lies proximate to the carrier. The microorganisms are either mobile or temporarily deactivated by freeze drying until rehydrated and remobilized. The microorganisms are capable of metabolizing the explosive material. Examples of such microorganisms include *Pseudomonas* spp., *Escherichia* spp., *Morganella* spp., *Rhodococcus* spp., *Comamonas* spp., and denitrifying microorganisms. If the explosive material fails to detonate, the explosive is remediated by the action of the microorganisms. Remediation includes both disabling of the explosive material and detoxification of the resulting chemical compositions.

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